

REMARKS

Claims 7-17 are pending in connection with the above-identified application. Claims 7 and 12 have been amended to define glyphosate derivative II and so as to recite a ratio for compound Ia to II of "1:1 to 0.01:1" which is supported at page 12, lines 21-23 of the specification. Claims 8 and 15 have been amended to recite the specific salts of glyphosate as supported at page 11, lines 18-24 of the specification.

It is respectfully requested that the above changes to the claims, as well as the declaration discussed below, be considered by the Examiner. It is submitted that the claim changes do not raise any significant new issues and introduce most of the changes proposed by the Examiner as discussed below. Also, the enclosed declaration submits test results that address the ratio issue discussed with the Examiner at the Interviews described below. Thus, it is requested that these be entered under 37 CFR 1.116(b).

Status of Claims

Claims 16 and 17 have been indicated as being allowable but have been objected to as depending upon rejected base claims. Claims 7-15 have been rejected as discussed below.

Interviews with Patent Examiner in October-November of 2009

As explained in the Interview Summary form issued with the Final Office Action dated November 30, 2009, Applicant's representative and the Examiner conducted several interviews in October and November of 2009 concerning a proposed Examiner's Amendment to place the present application into condition for allowance. The Interview Summary form accurately reflects that the Examiner had essentially agreed to place the present application into condition for allowance if present changes were made to claim 7 (and presumably claim 12), along with narrowing the recited ratio of compound Ia to glyphosate derivative II such that the ratio was --1:1 to 0.1:1-- (or 1:1 to 1:100). The reason for this narrowed range according to the Examiner was due to the ranges of the actual comparative test results disclosed in the specification and provided in the Brahm Declaration under 37 CFR 1.132 submitted with the Amendment filed June 30, 2010.

Submission of Brahm II Declaration

In order to provide additional comparative test results to further support the claimed range of 1:1 to 0.01:1, Applicant hereby submits the Brahm II Declaration under 37 CFR 1.132. The Brahm II Declaration shows that application of pyraclostrobin (a compound Ia) and glyphosate (II) at a ratio of 25:2,250 (or 1:90 or 0.01:0.9) results in unexpectedly and synergistically improved biomass increase for the tested soybean plants with a synergism rating of 32.63% based on the Colby formula. It is noted that the experiments described in the Brahm II Declaration examined biomass because time was too short to measure grain yield as it was too short of a time period to provide grain yield results because harvest had not yet arrived. In any case, it is also noted that glyphosate had a negative impact on crop growth even though glyphosate tolerant soybeans were used. In fact, given that fact that glyphosate had a negative impact, it is remarkable that this negative impact was more than completely overcome. Finally, it is submitted that the ratio of 0.01:0.9 (or 1:90) is very close to the claimed range of 0.01:1 (or 1:100) such that one skilled in the art would accept as reasonable an extrapolation from 1:90 to 1:100 so as to support the claimed range.

Issues under 35 USC 103(a)

Claims 7-15 have been rejected under 35 USC 103(a) as being unpatentable over Asrar '371 (US 2003/0060371). First, it is submitted that the above remarks together with the comparative tests submitted in the Brahm II Declaration support the allowability of claims 7-15. In addition, it is submitted that patentable distinctions exist over Asrar '371 for the following reasons.

Present Invention and Its Advantages

The claimed subject matter of the present invention is directed to a method for increasing the yield in glyphosate-resistant legumes, which includes treating the plants with a synergistic mixture comprising a strobilurin Ia and a glyphosate derivative II, as well as the mixtures thereof. Preferred embodiments of the present invention are recited in claims 10 and 15 which

encompass methods and mixtures that included (a) pyraclostrobin and (b) glyphosate in specific relative weight ratio amounts. Evidence of the advantageous properties exhibited by the method and mixture of the present invention is provided in the Table at page 15 of the present application, wherein the application of the combination of pyraclostrobin and glyphosate provides for synergistically enhanced yields as compared to application of glyphosate alone. In order to further support the unexpected, advantageous properties exhibited by the method and mixture of the present invention, Applicant submitted with the Amendment filed June 30, 2009 the Brahm Declaration submitted under 37 CFR 1.132 which showed that application of pyraclostrobin alone results in a slightly improved yield efficacy of 5.6%, while application of pyraclostrobin in combination with glyphosate provides for a synergistically improved efficacy of 25.8%. The Brahm II Declaration discussed above provides still further evidence of the unexpected, advantageous properties exhibited by the present invention with respect to biomass increase at a ratio of compound Ia:glyphosate II of 0.01:0.9 or very nearly 0.01:1. Consequently, it is submitted that the present record includes evidence in support of the unexpected, advantageous properties of the present invention which support the patentability of the present claims over the cited reference which is discussed in more detail below.

Distinctions over Asrar '371

Asrar '371 discloses a method for improving the yield and vigor of an agronomic plant, such as soybeans, by treating the plants and/or their propagation material with a composition that comprises an active agent, such as a diazole fungicide, a triazole fungicide or a strobilurin-type fungicide (see abstract and paragraph [0013]). The method can be carried out by seed treatment or, after the plants have sprouted, by foliar applications. In the latter case, the active agent can also be combined, if desired, with other agents, such as herbicides. If the supplementary active agent is an herbicide, it is preferred that the plant be a transgenic plant having a transgenic event that provides resistance to the particular herbicide used. The aim of this combination is said to be "to obtain further beneficial results" (see paragraph [0028]). The Asrar '371 document is silent about what is meant by these "further" beneficial results. Thus, a skilled person must deduce that this combination is only intended to combine two different, independent positive

features, namely the improvement of the vigor/yield by the fungicide plus a protection of the plant against unwanted weeds by the herbicide. There is not the slightest hint regarding the combined action of a fungicide and a herbicide to increase crop yield.

In contrast, the claimed subject matter of the present invention is directed to a method for increasing the yield in glyphosate-resistant legumes, which includes treating the plants with a synergistic mixture comprising a strobilurin Ia and a glyphosate derivative II, as well as mixtures thereof. In other words, the glyphosate derivative II is used as a synergist for the strobilurin fungicide Ia and thus serves a completely different purpose than in the Asrar '371 reference. Asrar '371 fails to recognize the synergistically and advantageously improved crop yield achieved by the present invention as evidenced by the comparative test results described at pages 14-15 of the present specification. This evidence has now been supplemented with the submission of the Brahm I and II Declarations which further establish that the method and mixture of the present invention exhibit unexpected, advantageous properties that fail to be recognized by Asrar '371. Consequently, significant patentable distinctions exist over Asrar '371. Even if prima facie obviousness is assumed to have been properly alleged, such obviousness has been rebutted by the evidence of unexpected, advantageous properties shown by the comparative test results. Thus, it is requested that the above rejection be withdrawn.

It is submitted for the reasons above that the present claims define patentable subject matter such that this application should now be placed in condition for allowance.


If any questions arise in the above matters, please contact Applicant's representative, Andrew D. Meikle (Reg. No. 32,868), in the Washington Metropolitan Area at the phone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

(Tuesday after federal holiday)

By 
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Enclosures: Brahm II Declaration under 37 CFR 1.132